SEQUENCE LISTING

<110> Soppet et al.

<120> G-Protein Parathyroid Hormone Receptor HLTDG74

<130> PF201D1

<140> 09/236,468
<141> 1999-01-25

<150> 08/468,011
<151> 1995-06-06

<160> 28

<170> PatentIn Ver. 2.1

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cac gtc tgg ggt tgg cta atg ctc ggc agc tgc ctc ctg gcc aga gcc 161
His Val Trp Gly Trp Leu Met Leu Gly Ser Cys Leu Leu Ala Arg Ala
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Gln Leu Asp Ser Asp Gly Thr Ile Thr Ile Glu Glu Gln Ile Val Leu
25 30 35 40

gtg ctg aaa gcg aaa gta caa tgt gaa ctc aac atc aca gct caa ctc 257
Val Leu Lys Ala Lys Val Gln Cys Glu Leu Asn Ile Thr Ala Gln Leu
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Gln Glu Gly Glu Gly Asn Cys Phe Pro Glu Trp Asp Gly Leu Ile Cys
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tgg ccc aga gga aca gtg ggg aaa ata tcg gct gtt cca tgc cct cct 353
Trp Pro Arg Gly Thr Val Gly Lys Ile Ser Ala Val Pro Cys Pro Pro
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tat att tat gac ttc aac cat aaa gga gtt gct ttc cga cac tgt aac 401
Tyr Ile Tyr Asp Phe Asn His Lys Gly Val Ala Phe Arg His Cys Asn
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ccc aat gga aca tgg gat ttt atg cac agc tta aat aaa aca tgg gcc 449
Pro Asn Gly Thr Trp Asp Phe Met His Ser Leu Asn Lys Thr Trp Ala
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Lys Gln Glu Phe Cys Glu Arg Leu Tyr Val Met Tyr Thr Val Gly Tyr
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tcc atc tct ttt ggt tcc ttg gct gtg gct att ctc atc att ggt tac    593
Ser Ile Ser Phe Gly Ser Leu Ala Val Ala Ile Leu Ile Ile Gly Tyr
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ttc aga cga ttg cat tgc act agg aac tat atc cac atg cac tta ttt    641
Phe Arg Arg Leu His Cys Thr Arg Asn Tyr Ile His Met His Leu Phe
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gtg tct ttc atg ctg aga gct aca agc atc ttt gtc aaa gac aga gta    689
Val Ser Phe Met Leu Arg Ala Thr Ser Ile Phe Val Lys Asp Arg Val
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gtc cat gct cac ata gga gta aag gag ctg gag tcc cta ata atg cag    737
Val His Ala His Ile Gly Val Lys Glu Leu Glu Ser Leu Ile Met Gln
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gat gac cca caa aat tcc att gag gca act tct gtg gac aaa tca caa    785
Asp Asp Pro Gln Asn Ser Ile Glu Ala Thr Ser Val Asp Lys Ser Gln
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tat atc ggg tgc aag att gct gtt gtg atg ttt att tac ttc ctg gct    833
Tyr Ile Gly Cys Lys Ile Ala Val Val Met Phe Ile Tyr Phe Leu Ala
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aca aat tat tat tgg atc ctg gtg gaa ggt ctc tac ctg cat aat ctc    881
Thr Asn Tyr Tyr Trp Ile Leu Val Glu Gly Leu Tyr Leu His Asn Leu
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atc ttt gtg gct ttc ttt tcg gac acc aaa tac ctg tgg ggc ttc atc    929
Ile Phe Val Ala Phe Phe Ser Asp Thr Lys Tyr Leu Trp Gly Phe Ile
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ttg ata ggc tgg ggg ttt cca gca gca ttt gtt gca gca tgg gct gtg    977
Leu Ile Gly Trp Gly Phe Pro Ala Ala Phe Val Ala Ala Trp Ala Val
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gca cga gca act ctg gct gat gcg agg tgc tgg gaa ctt agt gct gga    1025
Ala Arg Ala Thr Leu Ala Asp Ala Arg Cys Trp Glu Leu Ser Ala Gly
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gac atc aag tgg att tat caa gca ccg atc tta gca gct att ggg ctg    1073
Asp Ile Lys Trp Ile Tyr Gln Ala Pro Ile Leu Ala Ala Ile Gly Leu
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Asn Phe Ile Leu Phe Leu Asn Thr Val Arg Val Leu Ala Thr Lys Ile
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Trp Glu Thr Asn Ala Val Gly His Asp Thr Arg Lys Gln Tyr Arg Lys
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Ile Val Phe Val Cys Leu Pro His Ser Phe Thr Gly Leu Gly Trp Glu
380 385 390

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Ile Arg Met His Cys Glu Leu Phe Phe Asn Ser Phe Gln Gly Phe Phe
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His Ser Thr Ser Ser Gln Ser Gln Val Ala Ala Ala His Ala Trp Cys
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Thr Ser Leu Tyr Leu Ala Met Ser Gly Val Thr Gln Ser Arg Thr Ala
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Ser His Thr Leu Ser Thr Arg Ser Asn Lys Glu Asp Ser Gly Arg Gln
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Arg Asp Asp Ile Leu Met Glu Lys Pro Ser Arg Pro Met Glu Ser Asn
525 530 535

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Pro Asp Thr Glu Gly
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<213> Homo sapiens

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35 40 45

Glu Leu Asn Ile Thr Ala Gln Leu Gln Glu Gly Glu Gly Asn Cys Phe
50 55 60

Pro Glu Trp Asp Gly Leu Ile Cys Trp Pro Arg Gly Thr Val Gly Lys
65 70 75 80

Ile Ser Ala Val Pro Cys Pro Pro Tyr Ile Tyr Asp Phe Asn His Lys
85 90 95

Gly Val Ala Phe Arg His Cys Asn Pro Asn Gly Thr Trp Asp Phe Met
100 105 110

His Ser Leu Asn Lys Thr Trp Ala Asn Tyr Ser Asp Cys Leu Arg Phe
115 120 125

Leu Gln Pro Asp Ile Ser Ile Gly Lys Gln Glu Phe Cys Glu Arg Leu
130 135 140

Tyr Val Met Tyr Thr Val Gly Tyr Ser Ile Ser Phe Gly Ser Leu Ala
145 150 155 160

Val Ala Ile Leu Ile Ile Gly Tyr Phe Arg Arg Leu His Cys Thr Arg
165 170 175

Asn Tyr Ile His Met His Leu Phe Val Ser Phe Met Leu Arg Ala Thr
180 185 190

Ser Ile Phe Val Lys Asp Arg Val Val His Ala His Ile Gly Val Lys
195 200 205

Glu Leu Glu Ser Leu Ile Met Gln Asp Asp Pro Gln Asn Ser Ile Glu
210 215 220

Ala Thr Ser Val Asp Lys Ser Gln Tyr Ile Gly Cys Lys Ile Ala Val
225 230 235 240

Val Met Phe Ile Tyr Phe Leu Ala Thr Asn Tyr Tyr Trp Ile Leu Val
245 250 255

Glu Gly Leu Tyr Leu His Asn Leu Ile Phe Val Ala Phe Phe Ser Asp
260 265 270

Thr Lys Tyr Leu Trp Gly Phe Ile Leu Ile Gly Trp Gly Phe Pro Ala
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Ala Phe Val Ala Ala Trp Ala Val Ala Arg Ala Thr Leu Ala Asp Ala

290 295 300

Arg Cys Trp Glu Leu Ser Ala Gly Asp Ile Lys Trp Ile Tyr Gln Ala
305 310 315 320

Pro Ile Leu Ala Ala Ile Gly Leu Asn Phe Ile Leu Phe Leu Asn Thr
325 330 335

Val Arg Val Leu Ala Thr Lys Ile Trp Glu Thr Asn Ala Val Gly His
340 345 350

Asp Thr Arg Lys Gln Tyr Arg Lys Leu Ala Lys Ser Thr Leu Val Leu
355 360 365

Val Leu Val Phe Gly Val His Tyr Ile Val Phe Val Cys Leu Pro His
370 375 380

Ser Phe Thr Gly Leu Gly Trp Glu Ile Arg Met His Cys Glu Leu Phe
385 390 395 400

Phe Asn Ser Phe Gln Gly Phe Phe Val Ser Ile Ile Tyr Cys Tyr Cys
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Asn Gly Glu Val Gln Ala Glu Val Lys Lys Met Trp Ser Arg Trp Asn
420 425 430

Leu Ser Val Asp Trp Lys Arg Thr Pro Pro Cys Gly Ser Arg Arg Cys
435 440 445

Gly Ser Val Leu Thr Thr Val Thr His Ser Thr Ser Ser Gln Ser Gln
450 455 460

Val Ala Ala Ala His Ala Trp Cys Leu Ser Leu Ala Lys Leu Pro Arg
465 470 475 480

Ser Pro Ala Asp Ser Leu Thr Ala Thr Ser Leu Tyr Leu Ala Met Ser
485 490 495

Gly Val Thr Gln Ser Arg Thr Ala Ser His Thr Leu Ser Thr Arg Ser
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Pro Ser Arg Pro Met Glu Ser Asn Pro Asp Thr Glu Gly
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<210> 3
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> This 5' primer sequence contains a SmaI restriction enzyme site followed by nucleotides corresponding to PTH receptor coding sequence.

<400> 3
cagccgtccc gggcttggcc tgg 23

<210> 4
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> This 3' primer sequence contains a SalI restriction enzyme site and a sequence complementary to the human PTH receptor.

<400> 4
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<210> 5
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> This 5' primer contains a HindIII restriction enzyme site and a nucleotide sequence corresponding to the 5' UTR of the cDNA encoding human PTH receptor.

<400> 5
gttggcatat tggaagcttt ttgcggg 27

<210> 6
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> This 3' primer sequence contains an XbaI restriction enzyme site, a translation stop codon, and nucleotides complementary to the human PTH receptor coding sequence.

<400> 6
cagtttctag atgtcatcct tcagtgtc 28

<210> 7
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> This 5' primer contains a SmaI restriction enzyme site, a nucleotide sequence to provide efficient initiation of translation in eukaryotic cells, and a nucleotide sequence corresponding to the human PTH receptor cDNA, including an initiation codon.

<400> 7
tcctacccgg gccgccatca tggcctggct ggggggcct 39

<210> 8
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> This 3' primer contains an XbaI restriction enzyme site and a nucleotide sequence complementary to the 3' untranslated region of the PTH receptor cDNA.

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<213> Homo sapiens

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Phe Leu Ala Thr Asn Tyr Tyr Trp Ile Leu Val Glu Gly Leu Tyr Leu
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His Asn Leu Ile Phe Val Ala Phe Phe Ser Asp Thr
50 55 60

<210> 10
<211> 60
<212> PRT
<213> Didelphis virginiana

<400> 10
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1 5 10 15

Lys Ala Gly Phe Val Gly Cys Arg Val Ala Val Thr Val Phe Leu Tyr
20 25 30

Phe Leu Thr Thr Asn Tyr Tyr Trp Ile Leu Val Glu Gly Leu Tyr Leu
35 40 45

His Ser Leu Ile Phe Met Ala Phe Phe Ser Glu Lys
50 55 60

<210> 11
<211> 60
<212> PRT
<213> Homo sapiens

<400> 11
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1 5 10 15

Phe Val Ala Ala Trp Ala Val Ala Arg Ala Thr Leu Ala Asp Ala Arg
20 25 30

Cys Trp Glu Leu Ser Ala Gly Asp Ile Lys Trp Ile Tyr Gln Ala Pro
35 40 45

Ile Leu Ala Ala Ile Gly Leu Asn Phe Ile Leu Phe
50 55 60

<210> 12
<211> 60
<212> PRT
<213> Didelphis virginiana

<400> 12
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1 5 10 15

Phe Val Ala Val Trp Val Thr Val Arg Ala Thr Leu Ala Asn Thr Glu
20 25 30

Cys Trp Asp Leu Ser Ser Gly Asn Lys Lys Trp Ile Ile Gln Val Pro
35 40 45

Ile Leu Ala Ala Ile Val Val Asn Phe Ile Leu Phe
50 55 60

<210> 13
<211> 52
<212> PRT
<213> Homo sapiens

<400> 13
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1 5 10 15

Val Gly His Asp Thr Arg Lys Gln Tyr Arg Lys Leu Ala Lys Ser Thr
20 25 30

Leu Val Leu Val Leu Val Phe Gly Val His Tyr Ile Val Phe Val Cys
35 40 45

Leu Pro His Ser
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<210> 14
<211> 52
<212> PRT
<213> Didelphis virginiana

<400> 14
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1 5 10 15

Gly Arg Cys Asp Thr Arg Gln Gln Tyr Arg Lys Leu Leu Lys Ser Thr
20 25 30

Leu Val Leu Met Pro Leu Phe Gly Val His Tyr Ile Val Phe Met Ala
35 40 45

Thr Pro Tyr Thr
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<210> 15
<211> 60
<212> PRT
<213> Homo sapiens

<400> 15
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Gly Thr Val Gly Lys Ile Ser Ala Val Pro Cys Pro Pro Tyr Ile Tyr
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Thr Trp Asp Phe Met His Ser Leu Asn Lys Thr Trp
50 55 60

<210> 16
<211> 60
<212> PRT
<213> Didelphis virginiana

<400> 16
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35 40 45

Ser Trp Glu Leu Val Pro Gly Asn Asn Arg Thr Trp
50 55 60

<210> 17
<211> 10
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<400> 17
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<210> 18
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<213> Didelphis virginiana

<400> 18
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<210> 19
<211> 60
<212> PRT
<213> Homo sapiens

<400> 19
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35 40 45

Val Ser Phe Met Leu Arg Ala Thr Ser Ile Phe Val
50 55 60

<210> 20
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<210> 21
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<210> 22
<211> 21
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<213> Didelphis virginiana

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Ile Thr Glu Glu Glu
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<210> 23
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20 25 30

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35 40 45

Val Asp Trp Lys Arg Thr Pro Pro Cys Gly Ser
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<210> 24
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<212> PRT
<213> Didelphis virginiana

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1 5 10 15

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35 40 45

Leu Asp Phe Lys Arg Lys Ala Arg Ser Gly Ser
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<210> 25
<211> 37
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<213> Homo sapiens

<400> 25
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<210> 26
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<213> Didelphis virginiana

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20 25 30

Leu Arg Val Pro Glu
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Ile Thr Leu Pro Gly Tyr Val
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<210> 28
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<212> PRT
<213> Didelphis virginiana

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Leu Ser Pro Arg Leu Ala Pro Gly Ala Gly Ala Ser Ala Asn Gly His
1 5 10 15

His Gln Leu Pro Gly Tyr Val
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